

REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration is respectfully requested in view of the preceding amendments and the following remarks.

In this response, claim 2 has been cancelled, claim 1 has been amended to distinguish over the applied art, and new claims 6-9 have been added. The newly added claims are patentable in that they set forth subject matter which is neither disclosed nor suggested by cited art. Support for the new claims is found in the originally filed specification and drawings - see pages 12-18 and Figs. 1-4(e).

The objection to the drawings in that the subject matter of claim 2 (viz., the recited shapes) must be shown, is rendered moot by the cancellation of this claim.

Rejections under 35 U.S.C. § 102

The rejection of claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Hiramatsu et al., (US Publication No. 2002/0070307) is respectfully traversed.

In this response, claim 1 has been amended to call for the energy absorbing member to be a pin member which is configured for shear-deformation proximate a periphery of the one of the stopper and locking member in which the pin member is disposed, when the stopper moves in the axial direction along the shaft of the locking member. It is submitted that the Hiramatsu et al. reference does not suggest the pin structure now recited in the claims, in that the Hiramatsu et al. arrangement is directed to the use of a torque shaft and torque tube wherein the torque tube is used to temporarily supplement the energy absorption that is produced by the torque shaft. There is no pin structure

which is configured to undergo shear-deformation disclosed in Hiramatsu et al. and hence no anticipation of the claims as amended:

Rejections under 35 U.S.C. § 103

The rejection of claims 3-4 under 35 U.S.C. § 103(a) as being unpatentable over Hiramatsu et al. in view of Dybro et al., is respectfully traversed.

Firstly, this rejection is deemed to be rendered moot by the amendments to the claims that overcome the anticipation rejection of independent claim 1. Secondly, the rejection is traversed in that the teachings of the references which, when taken as a whole as is statutorily required, would not lead the hypothetical person of ordinary skill to the claimed subject matter.

More specifically, in this rejection, the Dybro et al. reference is relied upon to overcome the admitted shortcoming that the Hiramatsu et al. reference does not disclose a cutter disposed on one of the stopper or locking member. The motivation which is advanced in this action to provide a cutter is that it "would have been obvious to one having ordinary skill in the art at the time of the invention was made to provide Hiramatsu et al. with a cutter on the stopper 16 to absorb energy during movement of the stopper as taught by Dybro et al. in lieu of or addition to the energy-absorption member of Hiramatsu to reduce the number of parts required to accomplish the dual energy level absorption and load limiting function or to provide additional capacities or stages of energy absorption."

However, just how the number of parts would be reduced by adding a cutting structure to the Hiramatsu et al. system is not immediately self-evident or even if it would be possible *per se*. To replace the arrangement of Hiramatsu et al. with that used in Dybro et al., may reduce parts but would very likely convert the Hiramatsu et al. arrangement into that which is already disclosed in Dybro et al.

Apart from being fruitless, this modification would not be carried out in that the hypothetical person of ordinary skill, if in need of an arrangement which is purported to be possible in this rejection, would simply ignore Hiramatsu et al. and go directly to Dybro et al. and use it as it is.

Further, the basic concept of Hiramatsu et al. is to have a torque shaft and a torque tube and to produce a two stage/level energy level absorption characteristic of the nature depicted in Figs. 16(d) and 16(e). This would not go unnoticed by the hypothetical person of ordinary skill after having considered the Hiramatsu et al. reference.

Dybro et al. on the other hand, is such as to produce a single level absorption characteristic as shown in Fig. 4 of said reference. This can be best likened to the function of the torque shaft of Hiramatsu et al. Thus, one feasible result of the combination of the teachings of Hiramatsu and Dybro would be a replacement of the torque shaft with the cutting arrangement of Dybro. However, this actually tends away from the claimed subject matter.

Alternatively, if the cutting arrangement of Dybro et al. were to be transferred to Hiramatsu et al. in a manner to replace the function of the torque tube, then the two level

characteristics of Hiramatsu et al. may well be converted to a single level type. That is to say, there is nothing in Dybro et al. which would suggest that the cutting effect should terminate at some midway point of the energy attenuation process and accordingly cease to produce any energy attenuating effect so that some other (remaining) source of attenuation may be relied upon. In other words, the Dybro et al. arrangement is intended to produce an attenuating effect throughout the energy absorption process and therefore would not suggest that the torque tube of Hiramatsu et al., which produces an attenuating effect for a limited initial portion of the energy absorption process, could be replaced with a cutting process such as suggested in connection with the embodiment of Dybro et al. that is disclosed at column 4, lines 23-43, of this reference.

"If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." M.P.E.P. § 2143.02.

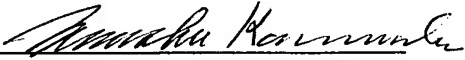
As to the possibility of adding additional capacities, it is submitted that hypothetical person of ordinary skill in the art "thinks along the lines of conventional wisdom in the art and is not one who undertakes to innovate *Standard Oil Co. v American Cyanamid Co.*, 227 USPQ2d 293, 298 (Fed. Cir. 1985)." It is submitted that the adding further capacities clearly enters into the realm of innovation and is not permitted in accordance with § 103.

Conclusion

It is submitted that the claims as they now stand before the Patent Office are allowable over the art of record.

Favorable reconsideration and allowance of this application is therefore respectfully requested.

Respectfully submitted

by 
Manabu Kanesaka
Reg. No. 31467
Agent for Applicants

1700 Diagonal Road, Suite 300
Alexandria, Virginia 22314
(703) 519-9785

MAN/KJT